



April 9, 2015

Ronald Merancy, Chairman  
Water Pollution Control Authority  
Borough of Naugatuck  
229 Church Street  
Naugatuck, CT 06770

**Re: March 2015 Monthly Operating Report**

Dear Mr. Merancy:

Enclosed please find Veolia Water's Monthly Operating Report for the month of March 2015.

Please contact me at the address below if you have any questions about this report.

Sincerely,  
Veolia Water North America – Northeast, LLC

A handwritten signature in black ink, appearing to read "John Batorski".

John Batorski  
Plant Manager  
Veolia Water Naugatuck

cc: WPCA members: Rimas Balsys, Catherine Aresta, Pat Mallane, Jeffrey Hanson, James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck, Kathleen Luvisi, Senior Environmental Engineer, Alternative Resources, Inc.

(enclosure)

**Borough of Naugatuck  
Monthly WPCF Report March 2015**

This report summarizes the activities at the Borough POTW for March 2015:

**1. Highlights and Significant Issues:** Please refer to the report.

**2. Collection System Update:**

Please see attached Collections Report.

**3. Plant Performance Summary:**

Please see the attached reports and graphs for additional performance details.

Plant Process Data	Limit	Actual
Total Suspended Solids (mg/l)		
Influent Avg.	-	135
Effluent Avg.	30	5
Removal Efficiency	85%	96%
Plant Process Data*	Limit	Actual
Carbonaceous BOD (mg/l)		
Influent Avg.	-	85
Eff Avg (Nov 1 – May 31)	25	
Eff Avg (June – Oct 31)	15	4
Removal Efficiency	85%	96%

Discharge Permit Exceedance: None

	Naugatuck	Middlebury	Oxford	OTR
April Flow Avg. (MGD)	6.7	0.813	0.052	N/A
Sludge Liquid Total (MGal)				5077.7
Sludge Cake Total (Wet Tons)				3182.1
Septage Total (MGal)	19,250	10,000	107,500	217,100
Discharge Permit Exceedance: None				

**Safety Incidents and Odor Complaints**

	Month	YTD
Recordable Accidents	0	0
Lost Time Accidents	0	0
Odor Complaints	1	1
Unconfirmed Odor Complaints	0	0

**1. Compliance & Regulatory Issues**

- a. There was one odor complaint in March. Phil Schnell, odor inspector with CTDEEP was onsite March 23 regarding the March 14 odor complaint from 326 Cherry Street. He did not perform a plant inspection however he did spend time upwind/downwind of the facility and no odors were noted. He also spoke to the resident that filed the complaint.

**2. Personnel**

- a. No report.

**3. Health & Safety**

- a. The Lead Mechanic presented the safety meeting on electrical safety, as he is a licensed electrician.

**4. Operational Information**

- a. The incinerator was shutdown March 6 and returned to service March 13 after almost 3 years of continuous operation. Maintenance was performed and the incinerator was returned to service.

**Borough of Naugatuck  
Monthly WPCF Report March 2015**

- b. Otis elevator was onsite March 25 to repair the leaking seal on the freight elevator. The hydraulic piping will also have to be replaced on this 35+ year old elevator.
- c. The odor counteractant spray system was turned on for the season in mid-March.

**5. Collections**

- a. The audio metric survey for collections was performed March 19, 2015.

**6. Maintenance**

- a. The North J Spin currently out for repair is expected back in early April. A factory tech will be onsite for the startup.
- b. The actuator for the ID fan was replaced.
- c. Both air compressors and the air dryer are now located in the plant boiler room (utility room).
- d. The South Abel sludge cake feed pump was rebuilt.
- e. All expansion joints were replaced on the hot oil system.
- f. A Cisco network switch was replaced under warranty during the incinerator shutdown.
- g. Approximately 880 gallons of thermal fluid was reprocessed.

**7. Capital Projects**

- a. No report.

Borough of Naugatuck  
Collections Systems Report  
March 2015



Calls for Service

1	3/01/15 - Mallane Ln
2	3/02/15 - 31 Woodcrest dr
3	3/02/15 - 65 Longwood dr
4	3/05/15 - New st easement to rt 63
5	3/10/15 - Coen st
6	3/11/15 and 3/24/15 - 23 Dunn Ave
7	

This Month

7

Year to Date

25

Calls Caused By Collection System

1	Mallane Ln
2	New st easement to rt 63
3	
4	

Reason

Piece of broken pvc pipe obstructing line
Roots in sewer line

High Velocity Cleaning

	Street Name	Date	Footage
1	Mallane Ln 3-21 to 3-20a	3/1/2015	185
2	Mallane Ln 3-20a to 3-20	3/1/2015	100
3	Mallane Ln no m/h # to 3-20a	3/1/2015	100
4	Longwood dr 11-100 to 11-130	3/3/2015	280
5	New st / rt 63 easement 7-27b downstream	3/5/2015	130
6	New st / rt 63 easement 7-27a upstream	3/9/2015	100
7	Raytkowich Rd 4-47 to 4-43	3/10/2015	1005
8	E. Waterbury Rd no m/h #s off of Great Hill Rd	3/10/2015	425
9	Seth dr no m/h # to 6-111	3/11/2015	150
10	Dunn Ave 9-85 upstream	3/11/2015	200
11	Highland Ave 9-185 to 9-171A	3/11/2015	340
12	Highland Ave 6-111 upstream	3/11/2015	150
13	Highland Ave 6-111 to 9-171	3/11/2015	225
14	Highland Ave 9-210 to 9-208	3/11/2015	330
15	Walnut St 6-155 to 9-208	3/11/2015	280
16	Walnut St 9-208 to 9-207	3/11/2015	105
17	Great Hill Rd 4-55 to 4-42	3/12/2015	1070
18	Raytkowich Rd 4-43 to 4-42	3/12/2015	305
19	Great Hill Rd 4-42 to 4-14	3/12/2015	695
20	Rado Dr 4-15 to 4-14	3/12/2015	200
21	Great Hill Rd 4-14 to 4-7	3/12/2015	947
22	E. Waterbury Rd no m/h # to 4-7	3/12/2015	100
23	Great Hill Rd 4-7 to 4-1	3/16/2015	1285
24	Great Hill Rd 4-1 to 3-93	3/16/2015	250
25	Great Hill Rd 3-113 to 3-110	3/16/2015	475
26	Great Hill Rd easement 3-107 to 3-102	3/17/2015	656
27	Great Hill Rd 3-102 to 3-100	3/17/2015	320
28	Great Hill Rd 3-100 to 3-93	3/18/2015	1415
29	May St 10-51 to 10-46	3/19/2015	1352
30	May St 10-46 to 10-159	3/19/2015	555
31	Florence St 10-75 to 10-49	3/19/2015	290
32	June St 10-84 to 10-46	3/19/2015	420
33	Auburn St 10-161a to 10-161	3/19/2015	260
34	Johnson St 10-166 to 10-159	3/19/2015	140
35	Hill St 10-156a to 10-156	3/25/2015	170
36	Pheonix Ave 10-173 to 10-158	3/25/2015	160
37	May St 10-159 to 10-150	3/25/2015	595
38	High St 10-153 to 10-150	3/25/2015	450
39	Maple Terrace 10-150 to 10-149	3/25/2015	170
40	Maple St 10-149 to 10-29	3/25/2015	150
41	Carrol St 10-30 to 10-29	3/25/2015	400
42	Coen St 10-180 to 7-245	3/26/2015	410
43	Oak St 10-181 to 10-179	3/26/2015	300
44	Oak St 10-24 upstream	3/26/2015	240
45	Oak St 10-178 to 10-177	3/26/2015	230
46	Hill St 10-183 to 10-182	3/26/2015	130
47	High St 10-182 to 10-178a	3/26/2015	250
48	Maple St 10-28 to 10-24	3/26/2015	200
49	Auburn St 10-161a upstream	3/26/2015	140
50	Carrol St 10-33 to 10-32	3/26/2015	150
51	High st 10-34 to 10-33	3/26/2015	200
52			

6 month list

Call for service

This Month

19155

Feet

Year to Date

132309

Feet

Root Treatment			
	Street Name	Type	Footage
1	New st / rt 63 easement m/h 7-27A upstream	root cutter	100
2			
3			
		This Month	Year to Date
		100 Feet	4011 Feet
Video Inspections			
	Street Name	Type	Footage
1	Mallane Ln m/h 3-20A to 3-19	cctv	220
2	New st / rt 63 easement m/h 7-27B downstream	cctv	120
3	New st / rt 63 easement m/h 7-27A upstream	cctv	100
4	Coen st m/h 7-246 to 7-247	cctv	300
5	Dunn Ave m/h 6-148 downstream	cctv	200
6	Morningmist st m/h 11-101 up and downstream	cctv	230
7	Hill st m/h 10-183 to 10-182	cctv	189
		This Month	Year to Date
		1359 Feet	4115 Feet
Pump Station Services			
	Work performed	Location	Date
1	weekly pumpstation checks	all 5	3/2/2015
2	weekly pumpstation checks	all 5	3/6/2015
3	weekly pumpstation checks	all 5	3/13/2015
4	weekly pumpstation checks	all 5	3/20/2015
5	weekly pumpstation checks	all 5	3/27/2015
6			
7			

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Pump 3
Inwood	End Reading	316	431.1	0.1
	Start Reading	271.7	384.8	0.1
	Hrs Run	44.3	46.3	0

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
MAPLE & MAY	End Reading	3383	2643.7
	Start Reading	3335.6	2602
	Hrs Run	47.4	41.7

PUMP RUN TIMES		HOURS		
STATION		Pump 1	Pump 2	Flow Meter
Platts Mill	End Reading	4535.9	5887.7	980770
	Start Reading	4535.9	5687.9	720227
	Hrs Run	0	199.8	260543 gal

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
Hopbrook	End Reading	1117.6	781.7
	Start Reading	1093.7	768
	Hrs Run	23.9	13.7

PUMP RUN TIMES		HOURS	
STATION		Pump 1	Pump 2
HORTON HILL	End Reading	7991	9760.9
	Start Reading	7890.8	9672.4
	Hrs Run	100.2	88.5

### Vac Truck Information

Days out of the plant working		
This Month	YTD	Remaining
16	134	16

Fuel Information	Fuel Cost	Fuel Used			
	\$243.54	70.0	Gallons	YTD Gallons	
	\$230.00	66.1	Gallons	1182.9	Gallons
	\$191.54	56.7	Gallons		
			Gallons	YTD Fuel Cost	
This Months Total	\$665.08	192.8	Gallons	\$3,942.12	

	Mileage		Engine Hours
Month Start	182582.8	Month Start	5468
Month End	183877.9	Month End	5539.6
Total	-1295.1	Total	-71.6

Utility Truck Information	Fuel Cost	Fuel Used		
	\$104.57	30.05	Gallons	YTD Gallons
	\$101.00	29.03	Gallons	667.99
			Gallons	
			Gallons	YTD Fuel Cost
Monthly Totals:	\$205.57	59.08	Gallons	\$1,930.22

### Other tasks and notes

1	3/02/15 - Morning snow removal at plant and pumpstations. Replaced air valve on Vac Truck.
2	3/03/15 - Vac out and clean the High Schools grease trap and pumpstation.
3	3/04/15 - Snow removal around the plant.
4	3/10/15 - Got a new battery for Platts Mill's generator and installed it.
5	3/13/15 - Washed the Service Truck.
6	3/16/15 - Did a 1 ft draw down on #2 pump at Platts Mill pumpstation. Walked industrial park easement.
7	3/17/15 - Unclogged a drop down at m/h 3-105
8	3/19/15 - Noise assessment evaluation all day. Vac out and clean liquid drop troff and sorrounding area.
9	3/20/15 - Vac out and clean Maple / May pumpstations wetwell.
10	3/23/15 - Vac out basement drains at plant and clean the floor.
11	3/24/15 - Did a PM on the Vac Truck and Service Truck. Vac out and Clean Inwood pumpstations wetwell.
12	3/25/15 - Met with Kinsley Power at pumpstations for generator services.
13	3/26/15 - Vac out and clean drains in the boiler room at plant.
14	3/30/15 - Vac out the Plants wetwell all day and one load of primary skimmings.
15	3/31/15 - Vac out and clean drain in front of foreign sludge drop. Vac out and clean Hopbrook pumpstations wetwell.
16	
17	
18	
19	
20	



Sent via certified mail #7009 2820 0004 1018 0989 on April 8, 2015

Municipal Wastewater Monitoring Coordinator  
Connecticut Department of Environmental Protection  
Bureau of Water Management  
79 Elm Street  
Hartford, CT 06106-5127

April 8, 2015

**Re: March 2015 Reports for Naugatuck, CT WPCF, NPDES # CT0100641**

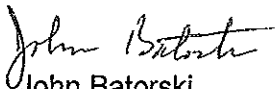
Dear Sir/Madam:

Enclosed please find the *Monthly Operating Report* for March 2015. The *Nutrients Analysis Report for Compliance with General Permit for Nitrogen Discharges* and the *Discharge Monitoring Report* was submitted electronically. There were no exceptions to the reports.

Also enclosed is a summary of sludge sources received at this facility during the month of March 2015.

Please contact me if you have any questions regarding the enclosed revised report.

Sincerely,  
Veolia Water North America – Northeast, LLC

  
John Batorski  
Plant Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck  
(Enclosure)





Units	Suspended Solids			Settleable Solids		Turbidity		Chlorine Dose		Chlorine Residual		Chlorine Residual Average	Fecal Coliform	E. Coli	Ammonia			Nitrite			Nitrate			TKN		
	Inf.	Prim Eff.	Final Eff.	Eff.	ml/l	NTU	Wk Day	lbs	mg/l	high	low	mg/l	4/wk day	#/100ml	3/week	Prim Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.	Inf.	Prim Eff.	Final Eff.	Prim Eff.	Final Eff.	Prim Eff.
Freq.	3/week	mg/l	mg/l	mg/l	Wk Day	Wk Day	4/Work Day	4/Work Day	mg/l	4/work day	mg/l	4/wk day	3/week	#/100ml	3/week	3/week	3/wk	3/wk	3/wk	3/wk	3/wk	3/wk	3/wk	3/wk	3/wk	3/wk
1							0.00	0.00																		
2	310	82	<5	0.0	0.0	2.2	0.00	0.00							22.60	19.5	0.15	0.010	<0.010	0.020	<0.02	2.800	38.50	28.20		1.250
3	260		<5	0.0	0.0	5.2	0.00	0.00							21.90		0.08	0.010		0.030	<0.02	2.990	35.90			1.330
4	170		<5	0.0	0.0	4.3	0.00	0.00							19.60		<0.05	0.020		0.030	<0.02	3.430	29.80			1.360
5				0.0	0.0	2.4	0.00	0.00																		
6				0.0	0.0	2.8	0.00	0.00																		
7							0.00	0.00																		
8							0.00	0.00																		
9	190	71	<5	0.0	0.0	2.9	0.00	0.00							19.50		0.09	0.130		0.020	0.44		3.540	31.10		1.210
10	110		<5	0.0	0.0	4.3	0.00	0.00							18.70		0.26	<0.010		0.040	<0.02		3.540	27.40		1.720
11	160		7	0.0	0.0	4.5	0.00	0.00							14.90		0.71	0.170		0.050	0.51		3.410	23.00		2.380
12				0.0	0.0	4.3	0.00	0.00																		
13				0.0	0.0	6.8	0.00	0.00																		
14							0.00	0.00																		
15							0.00	0.00																		
16	26	36	<5	0.0	0.0	2.9	0.00	0.00							10.30		0.08	0.120		0.010	1.05		2.840	13.80		0.980
17	58		6	0.0	0.0	2.5	0.00	0.00							8.02		0.08	0.130		<0.010	0.96		2.550	11.90		1.080
18	38		<5	0.0	0.0	4.3	0.00	0.00							10.30		0.06	0.120		0.020	1.01		2.310	15.50		1.060
19				0.0	0.0	4.6	0.00	0.00																		
20				0.0	0.0	8.8	0.00	0.00																		
21							0.00	0.00																		
22							0.00	0.00																		
23	150	56	<5	0.0	0.0	1.6	0.00	0.00							10.60		0.07	0.120		<0.010	0.59		2.300	16.90		1.050
24	100		<5	0.0	0.0	4.7	0.00	0.00							13.50		<0.05	0.110		<0.010	0.56		2.650	20.50		1.070
25	120		<5	0.0	0.0	3.0	0.00	0.00							13.30		<0.05	0.110		0.010	0.40		2.610	19.10		1.220
26				0.0	0.0	3.2	0.00	0.00																		
27				0.0	0.0	3.5	0.00	0.00																		
28							0.00	0.00																		
29							0.00	0.00																		
30	150		<5	0.0	0.0	3.5	0.00	0.00							10.70		<0.05	0.160		<0.010	0.49		2.490	18.00		1.010
31	43		<5	0.0	0.0	2.2	0.00	0.00							10.30		<0.05	0.130		<0.010	0.69		2.950	15.90		1.190
Total																										
Ave.	135	61	5	0.0	0.0	3.8	0.00	0.00							14.59	19.5	0.13	0.096	0.010	0.020	0.48	0.02	2.886	22.66	28.20	1.279

Units	Freq	Total N		Low D.O.	pH	Total P		Total P		Ortho P	Temp.		Arsenic	Copper	Nickel	Selenium	Zinc	Alkalinity				
		Inf.	Prim. Eff.			Inf.	Final Eff.	Inf.	Final Eff.		Inf.	Final Eff.						Inf.	Final Eff.	Pri.	Eff.	
		mg/l	Monthly	lb/d	mg/l	Nov-March (Monthly) (April-October) 2/week	Apr - Oct	Nov-March (Monthly) (April-October) 2/week	mg/l	Nov-March (Monthly) (April-October) 2/week	Work day	F	mg/l	mg/l	kg/d	kg/day	kg/d	kg/d	Wkly			
		lb/d	Mthly	4/wk day	Work Day																	
1																						
2		38.5	28.2	4.1	157	8.1	7.6	6.8	6.28	8.10	313	2.37	8.10	55.2	64.0	0.007	0.012	0.26	0.05	1.850	100	40
3		35.9		4.4	172	8.2	7.1	6.7		8.40	332		8.40	55.0	63.1						120	40
4		29.8		4.8	224	7.6	7.5	6.6						54.7	64.6						90	40
5					8.1	7.4	6.6							57.6	65.3						150	50
6					8.4	8.0	6.6							10.8	64.2						100	30
7																						
8																						
9		31.7		4.8	208	9.0	7.5	6.8														
10		27.4		5.3	252	8.9	7.4	6.8		4.82	210		4.88	51.6	55.6	0.004	0.25	0.02	1.874	100	60	
11		23.7		5.8	319	8.6	7.3	6.8		4.56	216		4.39	52.7	54.1						140	40
12						8.7	7.2	6.7						52.2	53.8						110	60
13						9.0	7.3	6.7						52.2	52.2						110	50
14														51.8	50.4						90	50
15																						
16		15.0		3.8	254	7.7	7.3	6.4														
17		13.0		3.6	258	7.2	7.2	6.4		4.20	279		4.20	50.0	59.2	0.004	0.27	0.06	2.743	70	40	
18		16.6		3.4	244	6.9	7.1	6.4		4.73	340		4.52	52.9	62.4						80	40
19						7.0	7.2	6.4						52.9	65.3						100	30
20						7.1	7.2	6.5						52.7	63.1						80	40
21														52.0	62.1						100	40
22																						
23		17.6		3.4	201	7.2	7.2	6.6														
24		21.2		3.7	219	7.4	7.3	6.7		4.00	237		4.00	54.0	62.4	0.004	0.26	0.08	2.466	80	30	
25		19.6		3.8	225	7.7	7.3	6.7		4.94	294		4.50	54.0	62.6						90	40
26						7.8	7.2	6.6						55.6	63.7						90	40
27						7.5	7.2	6.6						55.4	64.2						80	40
28														54.1	64.2						80	40
29																						
30		18.7		3.5	228	7.6	7.1	6.5														
31		16.7		4.2	273	7.4	7.2	6.4													110	60
Total																					70	40
Ave		23.2	28.2	4.2	231	7.9	7.3	6.6	6.28	5.47	277	2.37	5.37	53.4	61.2	0.004	0.012	0.26	0.05	2.233	97	43

Sludge Disposal Location:

Please return forms to:

DEEP - Water Bureau

ATTN: Municipal Wastewater Monitoring Coordinator

Municipal Facilities

79 Elm Street

Statement of Acknowledgement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Authorized Official:

John Batorski

Title:

Plant Manager

Signature: *John Batorski*

Date: *Apr 18 2015*

**Naugatuck WPCF March Sludge Report**

Originator_Name	Gallons	Wet Tons
Westport	118419	
Beacon Falls Treatment	110500	
North Canaan	39000	
Casella - Chicopee		318.64
Casella - Glen Cove		176.13
Casella - Huntington		303.14
Casella - Poughkeepsie		190.87
Casella - Suffolk		666.39
Casella - Yorktown Heights		43.44
Casella - Yorktown Heights		
Casella - Yorktown Heights		
Casella - Yorktown Heights		
Bristol		509.82
Torrington	403000	
Heritage Village Water	45500	
New Rochelle		
New Rochelle		629.15
Peckham / Byram - HI Stone	6500	
Southbury Car Wash	6500	
Lynwood Place	39000	
Mahopac Sludge & Septic	496000	
New Hartford	65000	
Southington	461500	
Milbar Laboratories	5700	
Ansonia - Synagro	117000	
Bridgeport - East - Synagro	31700	
Bridgeport - West - Synagro	247000	
Greenwich - Synagro	26000	
New Canaan - Synagro	39000	
Newtown - Synagro	13000	
Norwalk - Synagro	119699	
Ridgefield - Synagro	58500	
Stamford		61.24
Thomaston Treatment	52000	
Fairfield	26000	
Litchfield	52000	
Plymouth	130000	
Stratford	851500	
Windham	305500	
Americas Styrenics - VES	13000	
Americas Styrenics - sprinkler sys water	191735	
Bedford Hills	26000	
Danbury Cake		151.16
North Haven	143000	
Pepsi	13000	
Poughkeepsie	461500	
Redding	19500	
Seymour Cake		120.65
Southbury	208000	
Pawling	117000	
Rhinebeck WPCF		11.49
Vogler Bros	19500	
Totals	5077753	3182.12

**For compliance with General Permit for Nitrogen Discharges**

Month: Mar-15  
Design Flow: 10.3 MGD

[illegible]

Total Pounds	3224
Average Pounds	230.2857143

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

**Title:**

Sent electronically 4-8-15  
JB:sto

DMR Copy of Record

**Permit**  
 Permit #: CTD100641  
 Major: Yes  
 Permitted Feature: 001 External Outfall  
 Report Dates & Status: From 03/01/15 to 03/31/15  
 Monitoring Period: DMR Due Date: 04/15/15  
 Considerations for Form Completion: NetDMR Validated

**Facility:**  
 Facility Location: NAUGATUCK BOROUGH OF  
 500 CHERRY STREET  
 NAUGATUCK, CT 06770

**Permittee:**  
 Permittee Address: NAUGATUCK WPCF  
 500 CHERRY STREET  
 NAUGATUCK, CT 06770

**Discharge:**  
 001-1  
 SANITARY SEWAGE

**Principal Executive Officer**  
 First Name: John  
 Last Name: Butoraki  
 Title: Plant Manager  
 Telephone: 203-723-1433

**No Data Indicator (NODI)**  
 Form NODI:

Code	Parameter Name	Monitoring Location	Season	Param. NODI	Qualifier	Value 1	Qualifier	Value 2	Units	Qualifier	Value 1	Qualifier	Value 2	Units	Qualifier	Value 3	Units	% of Ex.	Frequency of Analysis	Sample Type
00311	Temperature, water temp. (ahrenheit)	W - See Comments	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01/00 - Once Every 2 Months	GR - GRAB
00358	Flow rate	1 - Effluent Gross	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00300	Oxygen, dissolved (DO)	1 - Effluent Gross	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00310	BOD, 5-day, 20 deg. C	T - See Comments	1	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00400	pH	1 - Effluent Gross	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00400	pH	3 - See Comments	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00400	pH	W - See Comments	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB
00530	Solids, total suspended	Q - Raw Sewage Influent	0	-	6.7	Req Mon MO AVG	0.9	Req Mon DAILY MX	03 - MGD	0.9	Req Mon INST MAX	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	15 - deg F	01/00 - Once Every 2 Months	GR - GRAB

Sent electronically 4-8-15 *[Signature]*









[illegible]





STATE OF CONNECTICUT  
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
WATER PROTECTION AND LAND REUSE BUREAU



BYPASS REPORT FORM

City or Town: Naugatuck

Type of Bypass

- ☒ Raw Sewage  
☐ Disinfected Raw Sewage  
☐ Partially Treated Sewage  
☐ Disinfected Partially Treated Sewage  
☐ Sludge Spill  
☐ Other: \_\_\_\_\_

Location of Bypass

- ☐ Treatment Plant  
☐ Pump Station  
☒ Manhole, ☐ Lateral, ☐ Basement  
☐ Main, ☐ Private

Cause of Bypass

- ☐ Weather Conditions \_\_\_\_\_  
☐ Mechanical Equipment Failure  
☐ Electric Utility Failure  
☐ Electrical Equipment Failure  
☐ Approved Shutdown  
☐ Limited capacity: ☐ Dry weather  
☐ Wet weather

Blockage of Sewer Line due to:

- ☐ Grease, ☐ Roots, ☒ Other:  
need to investigate

Exact Location of By-Pass: right of way between New St & RT. 63, between 446-229 & 7-27

Date and Time By-Pass was Discovered: 3/5/2015 2100 AM/PM

Date and Time By-Pass was Stopped: 3/5/2015 3145 AM/PM

How By-Pass was Discovered: Town employee noticed flow down the hill

Quantity/Volume of By-Pass: 1,300 gallons

How Quantity/Volume was Determined: visually, estimate

If Equipment Failure, date of last inspection, maintenance or repairs: / /

Receiving Waters (If Applicable) HOP BROOK

Steps taken to minimize volume and duration of By-Pass: Jetting of line

Action taken to eliminate By-Pass: Jetting of line

Steps Taken to prevent recurrence of By-Pass: camera line to identify and repair issue

Was area of By-Pass cleaned of debris? ☒ Yes ☐ No

Method Used: Manual labor

Date of Last Blockage / Back up / Surcharge no record of any issues at this location: / /

7/27/2011

## BYPASS NOTIFICATION LOG

Permittee shall notify DEEP within 2 hours of becoming aware of the bypass and shall submit a written report within 5 days.

### DATE/ TIME

2 hours notification notification

\_\_\_/\_\_\_ CT DEEP - Iliana Raffa (860) 424-3758 (Primary DEEP Contact)  
If Iliana Raffa is not available, you must call Municipal Facilities Section at number below:

3/5/13<sup>5:00 PM</sup> CT DEEP (860) 424-3704 [(860) 424-3338 (DEEP Emergency Dispatch) only for after hours] DO NOT LEAVE VOICE MAIL MESSAGES

2015-00939 #203 Name of person contacted

\_\_\_/\_\_\_ CT Bureau of Aquaculture (203) 874-0696 Option 2 Monday through Friday 8:00 and 4:30 pm (Required only if bypass is south of Interstate Route 95)  
Name of person contacted.

After hours/weekend must refer to call list provided by Bureau of Aquaculture  
DO NOT LEAVE VOICE MAIL MESSAGES

\_\_\_/\_\_\_ CT Dept. of Public Health (860) 509-7333 (Drinking Water Section) notify Monday through Friday 8:30 to 5:00 pm if bypass occurred in following towns: Bristol, Cheshire, Danbury, Goshen, Groton, Hamden, Manchester, Mansfield, Middletown, North Haven, Norwalk, Ridgefield, Shelton, Stamford Vernon, and Woodstock.

\_\_\_/\_\_\_ Name of person contacted

\_\_\_/\_\_\_ CT Dept. of Public Health (860) 509-7296 (Recreation Section) notify from Monday through Friday 8:30 to 5:00pm if bypass occurred from April 1<sup>st</sup> through September 30<sup>th</sup>.

\_\_\_/\_\_\_ Name of person contacted

\_\_\_/\_\_\_ Local Health Department or Regional Health District  
Name of person contacted

\_\_\_/\_\_\_ Health Director of Contiguous Towns (Coastal Plants Only) or Health Director of Town Downstream (Inland Plants)

\_\_\_/\_\_\_ Name of person contacted

3/6/13<sup>3:00 PM</sup> Fax to CT DEEP, Iliana Ayala (860) 424-4067

\_\_\_/\_\_\_ Fax to CT Aquaculture (203) 783-9976 (If south of I-95)

3/6/13<sup>3:00 PM</sup> Fax to Local Health Department or Regional Health District 203-881-3259

Report Submitted by: Christopher Makuch Title: Assistant Plant Manager

Signature: [Signature] Date: 3/6/2015 Phone # 203-723-1433

Submit Completed Report to either by fax or by mail: State of Connecticut, Department of Energy & Environmental Protection, Water Bureau - Attention: Iliana Raffa, 79 Elm Street, Hartford, CT 06106-5127

Rev. 7/27/2011

Final Report Within 5 days



VEOLIA WATER NORTH AMERICA  
600 Cherry Street  
Naugatuck, CT 06770

Tel : 203-723-1433 / 888-682-1433  
Fax : 203-723-8539  
www.veoliawaterma.com



**Fax**

TO *Iliana Raffa, CT DEEP*

FAX *860-424-4067*

FROM *Christopher Malach Veolia Water  
Naugatuck WWTP*

DATE *3/6/2015*

PAGES: *3*  
Including this page

SUBJECT

*sewer line bypass report*

MESSAGE

---

---

---

---

---

\* \* \* Communication Result Report ( Mar. 6. 2015 8:19AM ) \* \* \*

1) Veolia Water-NET LLC  
2)

Date/Time: Mar. 6. 2015 8:18AM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
5949 Memory TX	18604244067	P. 3	OK	

## Reason for error

- |                                 |   |
|---------------------------------|---|
| E. 1) Hang up or line fail      | E. 2) Busy                                |
| E. 3) No answer                 | E. 4) No facsimile connection             |
| E. 5) Exceeded max. E-mail size | E. 6) Destination does not support IP-Fax |



VEOLIA WATER  
100 Henry Road  
Hugobon, CT 06110

Tel: 203-722-1432 / 203-692-1433  
Fax: 203-722-3033  
www.veoliamerica.com

Fax

to Thina Ruffa, CT DEEP

FAX 860-424-4067

FROM Christopher Melach Veolia water  
Naugatuck WWTP

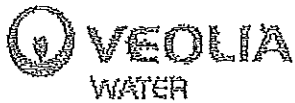
DATE 3/6/2015

PAGES: 3  
including this page

SUBJECT Sewer line bypass report

MESSAGE

THIS TRANSMISSION CARRIES CONFIDENTIAL INFORMATION INTENDED FOR THE USE ONLY BY THE ABOVE NAMED ADDRESSEE. SHOULD  
RECEIVER BE UNABLE TO READ OR OPEN THIS MESSAGE, IT IS REQUESTED THAT YOU CONTACT THE SENDER TO REQUEST A RESEND OR  
IF YOU ARE AN EMPLOYEE OF A BUSINESS, IF YOU HAVE RECEIVED THIS FAX IN ERROR, PLEASE IMMEDIATELY REPORT US BY TELEPHONE  
COLLECT, AND RETURN YOUR RESPONSE TO 203-722-1432 OR 203-692-1433.



VEOLIA WATER NORTH AMERICA  
500 Cherry Street  
Naugatuck, CT 06770

Tel : 203-723-1433 / 888-882-1433  
Fax : 203-723-8539  
www.veoliawaterma.com



Fax

TO *Naugatuck Valley Health Department*

FAX *203-881-3254*

FROM *Christopher Makuch Veolia Water  
Naugatuck WWTP*

DATE *3/6/2015*

PAGES: *3*  
Including this page

SUBJECT *Sewer line bypass Report*

MESSAGE

---

---

---

---

---

\* \* \* Communication Result Report ( Mar. 6. 2015 8:18AM ) \* \* \*

1) Veolia Water-NET LLC  
2)

( Date/Time: Mar. 6. 2015 8:17AM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
5948 Memory TX	2038813259	P. 3	OK	

## Reason for error

E. 1) Hang up or line fail

E. 3) No answer

E. 5) Exceeded max. E-mail size

E. 2) Busy

E. 4) No facsimile connection

E. 6) Destination does not support IP-Fax



VEOLIA WATER NORTH AMERICA  
800 Cherry Street  
Hartford, CT 06183

Tel: 860-298-1413 / 860-298-1438  
Fax: 860-298-4510  
www.veoliamna.com

Fax

TO Naugatuck Valley Health Department

FAX 203-881-7254

FROM Christopher Malach, Veolia Water  
Naugatuck, WVP

DATE 3/6/2015

PAGES: 3  
Including this page

SUBJECT Sewer line bypass Report

MESSAGE

THIS TRANSMISSION CONTAINS CONFIDENTIAL INFORMATION INTENDED FOR THE EYE OF THE ABOVE PARTY ONLY. REPRODUCTION, DISTRIBUTION, OR COPIES OF THIS MESSAGE IS STRICTLY PROHIBITED BY ANYONE OTHER THAN THE ABOVE PARTY. IF YOU ARE NOT THE ABOVE PARTY, YOU MUST NOT DISCLOSE THIS INFORMATION TO ANY OTHER PERSON. IF YOU HAVE RECEIVED THIS MESSAGE IN ERROR, PLEASE CONTACT THE SENDER IMMEDIATELY BY PHONE OR E-MAIL TO CORRECT THE ERROR. YOUR COOPERATION IN THIS MATTER IS APPRECIATED.





Connecticut Department of

ENERGY &  
ENVIRONMENTAL  
PROTECTION

79 Elm Street • Hartford, CT 06106-5127

[www.ct.gov/deep](http://www.ct.gov/deep)

Affirmative Action/Equal Opportunity Employ

March 27, 2015

Electric Cable Compounds, Inc.  
108 Rado Drive  
Naugatuck, CT 06770

Attn: Jim Morrell, Director HES ECC

Re: Voluntary Self-Disclosure

Dear Mr. Morrell:

This is to acknowledge receipt of your January 26, 2015 letter, which provided additional information concerning violations disclosed by Electric Cable Compounds ("ECC") under the Department's *Policy on Incentives for Self-Policing* (the "*Self-Policing Policy*"). The January 26<sup>th</sup> letter was submitted in response to the Department's January 7, 2015 request for additional information.

ECC's application for registration for coverage under the Department's *General Permit for the Discharge of Stormwater Associated with Industrial Activity* has been received for processing by the Water Permitting and Enforcement Division ("WPED"). Please note that application no. 201500103 has been assigned to ECC's application. It is anticipated that the approval of registration will be issued at the beginning of April.

In your letter, you anticipated that the application for an industrial wastewater pretreatment permit would be submitted by March 6, 2015. Be advised that as of the date of this letter, the application has not been received by WPED. Please contact Peter Ploch at 860-424-3280 or via e-mail at [Peter.ploch@ct.gov](mailto:Peter.ploch@ct.gov), or Mariana Miller at 860-424-3805 or via e-mail at [Mariana.miller@ct.gov](mailto:Mariana.miller@ct.gov), to provide notification as to when the application will be submitted.

As indicated in my January 7, 2015 letter to ECC, WPED must still assess the need to take action to recover the economic benefit that ECC obtained by failing to comply with the applicable statutes and regulations. This assessment will be conducted after both permit applications have been received and reviewed, and monitoring requirements for the permits have been developed.

Yours truly,

Oswald Inglese, Jr., Director  
DEEP Water Permitting and Enforcement Division

Note: CCs on reverse side

CC: Peter Ploch, DEEP/WPED (via e-mail)  
Mariana Miller, DEEP/WPED (via e-mail)  
Karen Abbott, DEEP/WPED (via e-mail)  
Nicole Lugli, DEEP Office of Planning and Compliance Assurance (via e-mail)  
Gene Fridland, Electric Cable Compounds  
Brian Freeman, Esq., Robinson & Cole  
James Stewart, Director of Public Works, Naugatuck  
John Batorski, Veolia Water, Naugatuck POTW  
Gil Ryan, Woodard & Curran

March 31, 2015  
W-P Project No. 13117A

Mr. John Batorski, Project Manager  
Veolia Water  
500 Cherry Street  
Naugatuck, CT 06770

Subject: Naugatuck Water Pollution Control Facility (WPCF)  
Review of Ash Lagoon Management Plan for Compliance with  
NPDES Permit No. 0100641

Dear John:

As requested, Wright-Pierce has reviewed the Ash Lagoon Management Plan developed by Veolia Water (VW) for the Naugatuck WPCF. On February 12, 2015, Wright-Pierce (W-P) personnel performed a site visit to inspect the lagoons and ash handling facilities. Tom Deller and Natalie Verlezza were present from VW, and Mariusz Jedrychowski, PE, and Amanda Ziegler, PE, represented W-P. At the meeting, W-P and VW staff discussed ash lagoon procedures and permit requirements, and then W-P performed a site inspection of the lagoons and ash handling area.

The following are ash lagoon specific permit requirements, as outlined in Section 10, Paragraph B of the permit, followed by a description of current operations and procedures at the Naugatuck WPCF. A complete copy of NPDES Permit No. 0100641 is included as Attachment A.

*(1) Description of best management practices including the dredging of the ash lagoons on a frequency necessary for maintaining them in a good operational condition.*

There are two ash lagoons at the Naugatuck WPCF. Each is capable of treating the ash effluent from the incinerator, and lagoons are set up to operate individually. The ash slurry flow rate is ~300 gpm. Each lagoon has 792,000 gallons of available volume when empty, giving an approximate retention time of 44 hours. The available volume slowly decreases while the lagoon is in operation as ashes settle out. The effluent is sampled weekly to ensure the ash slurry is being properly treated.

Once the Total Suspended Solids (TSS) in the effluent of the operating lagoon reaches approximately 200 mg/L, the lagoon is taken offline and the standby lagoon is put into service. Lagoons are emptied by activating the valves such that the standby lagoon is put online and the active lagoon is closed. The lagoon is then allowed to drain slowly back to the headworks. Once the liquid level drops below the effluent structure, a sump pump is used to pump out the remaining liquid. After the lagoon is emptied, it is dredged, inspected, and repaired if needed. Generally, lagoons are switched and dredged once per year. See Attachment B (Ash Lagoon Management Plan) for further details.



*(2) Description of the dewatering and disposal measures of the dredge spoils in accordance with applicable regulations and best management practices.*

After a lagoon is taken offline and emptied, it gradually dries out and is dredged. Dredging typically occurs from the edges inward as the edges dry out first. Stockpiled dredged material is piled and allowed to drain, either in the non-operating lagoon or on the center berm between lagoons. No ash is deposited or stockpiled on the exterior edges of the lagoons; ash is only temporarily piled on the berm between lagoons so runoff is contained within the lagoons. Once drained, ash is moved to the ash lagoon pad, which is an impervious structure adjacent to the lagoon area enclosed by concrete blocks. VW staff sprays water on the ash as needed to eliminate fugitive dust. See Attachment B for further details. Dredged ash spoils are hauled offsite to a permitted landfill and used as a daily cover.

*(3) Implementation and maintenance of proper erosion control measures.*

The lagoon area has been graded and seeded such that runoff is directed into the lagoons. A silt fence is installed around the perimeter of the lagoons.

The ash lagoon perimeter is graded and sloped to allow any runoff to flow directly into the lagoons. The ash lagoon perimeter is seeded and mowed, with the exception of the loading area. A silt fence along the entire perimeter provides additional protection to contain runoff. The silt fence is inspected and maintained as needed. Groundwater monitoring of the area around the ash lagoons is not required.

*(4) Verification that the existing sampling location(s) at the effluent of each ash lagoon is representative of the discharge.*

Effluent monitoring is performed at the effluent structure, which provides a representative sample of the effluent. Ash slurry from the incinerator enters the lagoons from the east and effluent structures are located opposite each inlet. This gives maximum retention time in the lagoons for most effective treatment. Flow through the lagoons is slow, which minimizes mixing and encourages particles to settle. See Attachment B for photos showing sampling locations.

The ash lagoon effluent is sampled every Wednesday and samples are sent to the laboratory bi-monthly. Effluent samples are analyzed for the parameters required by Table G of the permit (see Attachment B). A representative laboratory report (included in Attachment C, Laboratory Results) shows the test results. All parameters are included except temperature, pH, and TSS, which are included in the attached "Lab Bench" report (included in Attachment C).

*(5) Establishment of a monitoring program in accordance with the requirements of table G monitoring location W included in Attachment B of this permit.*

Ash lagoon effluent is sampled every Wednesday. The permit requires sampling to be conducted bi-monthly. Weekly sampling meets and exceeds the permit requirements. Samples are sent to the laboratory every other month for analysis.

*Other Considerations*

Mr. John Batorski  
March 31, 2015  
Page 3 of 3



On February 14, 2015, a trespassing vehicle accessed the lagoon area through the Elm Street entrance. The vehicle continued past numerous signs stating "Authorized Personnel Only" and proceeded into the lagoon area. Although no damage was inflicted and no one was injured in this incident, there are significant hazards in the area and trespassers must be kept out.

There is an existing electric gate along Elm Street that is owned and maintained by Chemtura, but this gate is currently inoperable, which allowed the vehicle to access the ash lagoon area. VW staff will install a cattle gate and sign to ensure the area is more effectively secured.

Based on our review of pertinent information provided by VW, interviews with VW staff, and site visit observations, Wright-Pierce concludes that the Naugatuck WPCF ash lagoon maintenance and sampling plan developed by VW meets the ash lagoon specific requirements outlined in Section 10, paragraph B of Permit No. 0100641.

Please contact us if you have any questions.

Sincerely,  
WRIGHT-PIERCE

Mariusz Jedrychowski, P.E.  
Senior Project Manager

Amanda E. Ziegler, PE  
Project Engineer



Sent via certified mail on April 3, 2015: Receipt # 7009 2820 0004 1018 0972

April 3, 2015

Connecticut Department of Energy and Environmental Protection  
Mr. John Degirolamo  
Bureau of Air Management  
Compliance Analysis & Coordination Unit  
79 Elm Street, 5<sup>th</sup> Floor  
Hartford, CT 06106-5127

Subject: First Quarter 2015 CEM Cylinder Gas & Opacity Report

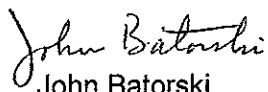
Dear Mr. Degirolamo:

Enclosed please find enclosed a copy of the *Cylinder Gas/Opacity Audits* for the first quarter of 2015. All data is within acceptable ranges.

Please contact me if you have any questions regarding the enclosed reports.

Sincerely,

Veolia Water North America-Northeast, LLC

  
John Batorski  
Project Manager

cc: James R. Stewart PE, LS, Director of Public Works, Borough of Naugatuck.  
(enclosure)



# **Test Report – CEMS Cylinder Gas & Opacity Audit First Quarter 2015**

**CEMS/COMS Monitoring the Fluidized Bed Incinerator  
Borough of Naugatuck  
Naugatuck, CT**

**PREPARED FOR:** Veolia Water  
500 Cherry Street  
Naugatuck, Connecticut 06770

**CONCERNING:** Cylinder Gas Audit (CGA) and Opacity Audit  
Fluidized Bed Incinerator  
500 Cherry Street  
Naugatuck, Connecticut 06770

**PREPARED BY:** CK Environmental, Inc.  
1020 Turnpike Street, Suite # 8  
Canton, MA 02021

CK Project No. 4861

April 2, 2015

---

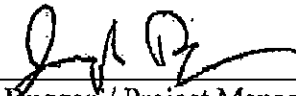
CK Environmental, Inc.  
1020 Turnpike St., Suite 8  
Canton, MA 02021 USA  
*Toll-free:* 888-CKE-0303  
*International:* 781-828-5200  
*Fax:* 781-828-5380  
[www.ckenvironmental.com](http://www.ckenvironmental.com)



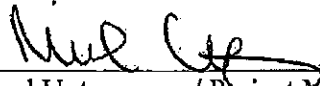
## REPORT REVIEW CERTIFICATION

I, the undersigned, hereby certify that I have personally reviewed this report and to the best of my knowledge all information and calculations contained herein are true, accurate, and complete.

Prepared by:

  
Joseph Euggan / Project Manager

Reviewed by:

  
Michael Unterweger / Project Manager





## **TABLE OF CONTENTS**

### **SECTION**

#### **1.0 INTRODUCTION**

- 1.1 Summary of Test Program
- 1.2 Key Personnel

#### **2.0 PLANT AND SAMPLING SYSTEM DESCRIPTION**

- 2.1 Process Description and Operation
- 2.2 Continuous Emissions Monitoring System

#### **3.0 SUMMARY OF RESULTS**

- 3.1 Objectives
- 3.2 Field Test Changes
- 3.3 Presentation of Results

#### **4.0 SAMPLING AND ANALYTICAL PROCEDURES**

- 4.1 Cylinder Gas Audit
- 4.2 Opacity Audit Procedure

#### **5.0 CK'S QUALITY ASSURANCE PROCEDURES**

- 5.1 Sampling
- 5.2 Reporting

### **TABLES**

Table 1-1	Key Personnel
Table 2-1	CEMS Specifications
Table 3-1	Summary of Results – Cylinder Gas Audit
Table 3-2	Summary of Results – Opacity Audit

### **APPENDICES**

Appendix A	Field Data & Calculation Sheets
Appendix B	Facility CEMS & COMS Data
Appendix C	Opacity Filter & Calibration Gas Certificates



### **TEST SUMMARY**

Facility Name: **Veolia Water North America – Northeast, LLC**  
500 Cherry Street  
Naugatuck, Connecticut

Facility Contact: **Veolia Water NA – Northeast, LLC**  
John Batorski / Plant Manager  
Tel. No. 203-723-1433  
Email: [john.batorski@veoliawaterna.com](mailto:john.batorski@veoliawaterna.com)

Regulatory Agency:  
Contact: **State of Connecticut**  
**Department of Energy and Environmental Protection**  
John Degirolamo / Air Pollution Control Engineer  
Tel. No. 203-424-3562

Testing Organization: **CK Environmental, Inc.**  
1020 Turnpike Street, Suite 8  
Canton, Massachusetts 02021

Project Manager: Mr. Michael Unterweger / Project Manager  
Tel. No. 781-828-5200  
Email: [munterweger@cke.us](mailto:munterweger@cke.us)

Test Personnel: Mr. Michael Unterweger / Project Engineer

Unit Tested: Sludge Incinerator Exhaust Stack

Test Date: March 25, 2015



## 1.0 INTRODUCTION

### 1.1 Summary of Test Program

CK Environmental, Inc. (CK) was contracted by Veolia Water North America to conduct a cylinder gas audit (CGA) and an opacity audit on the Continuous Emissions Monitoring System (CEMS) which monitors the emissions at the Fluidized Bed Incinerator located in Naugatuck, Connecticut. The CEMS/COMS monitor the emissions of oxygen, carbon monoxide and opacity from the incinerator operated at this facility. Auditing of the CEMS/COMS was conducted on March 25, 2015.

The purpose of this test program was to demonstrate that the accuracy of the CEMS/COMS operated at this facility and to ensure that it met the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0. The opacity audit was performed to satisfy the quarterly "Performance Specification 1, Section 7.0.

A brief description of the facility is contained in Section 2.0. Section 3.0 of this test report summarizes the results of this testing program. Section 4.0 describes the test methods and procedures used. The CK quality assurance procedures are detailed in Section 5.0. Test field data sheets have been included in Appendix A. Facility CEMS and process data printouts are presented in Appendix B. All relevant calibration documentation has been provided in Appendix C.

### 1.2 Key Personnel

The test program was coordinated by John Batorski. Mr. Michael Unterweger of CK is the project manager for this effort and was responsible for all on-site audit activities. Contact information for key personnel can be found in Table 1-1 below.

**Table 1-1**  
Key Personnel

Contact	Company	Telephone No.
John Batorski	Veolia Water	203-723-1433
Michael Unterweger	CK Environmental, Inc.	781-828-5200



## **2.0 PLANT AND SAMPLING SYSTEM DESCRIPTION**

### **2.1 Process Description and Operation**

Veolia Water North America Northeast, LLC operates the Borough of Naugatuck POTW which incinerates approximately 51 dry tons of municipal sludge per day and processes nonhazardous industrial waste water. A fluidized bed incinerator (FBI) is used to incinerate sludge. The POTW also houses settling tanks, aeration tanks, thickening tanks, holding tanks, and sludge belt filter presses.

The Zimpro fluidized bed incinerator has a sludge design feed rate of 3.5 DT/hr. Sludge is fed to the bottom of the sand bed where air is injected at high pressure under the bed, fluidizing the sand and the sludge. Processing of sludge within the sand bed consists of evaporation of water and pyrolysis of organic material. The remaining carbon and combustible gases are burned in the freeboard area above the sand bed. Oil lances are located within the sand bed in order to deliver auxiliary fuel to maintain the desired combustion temperature if necessary. All ash generated in the combustion chamber leaves the top of the incinerator.

After the flue gas passes through the waste heat recovery unit, particulate is removed by a combined venturi and impingement tray scrubber system, and wet electrostatic precipitators (WESP). The venturi section consists of a narrow, adjustable throat, which increases gas velocity, turbulence and contact with added water, in order to collect ash particles and acid gases. The impingement tray scrubber provides cool plant effluent, which removes additional particulate and acid gases. There are two identical WESPs located in parallel of which only one operates at any given time.

### **2.2 Continuous Emission Monitoring System**

The continuous emissions/continuous opacity monitoring system is designed to meet the requirements of 40 CFR, §60.13, §60.150 and 40 CFR, Part 503, Subpart E, §503.40., and 40 CFR, Part 60, Appendix B, PS 1. The extractive CEMS transport sample gas from the stack mounted sample probe via heated lines and sample conditioning system to the analyzers for continuous monitoring of gaseous pollutants. Effluent concentrations of carbon monoxide (CO) and oxygen (O<sub>2</sub>) are measured by the CEM system. In addition, the system monitors opacity at the outlet stack of the FBI.

The CEM sampling system is full dry extractive design. The system extracts a sample from the gas stream through a primary filter located at the sample probe, and transports it from the sampling location to the CEMS analysis enclosure in a heated sample line. The sample lines and filter are maintained at 250 °F to prevent the sample from condensing during transportation to the sample conditioning system. The heated line terminates at a thermo-electric condenser where moisture is removed from the sample gas stream. Dry sample gas exiting the condenser passes through a second particulate filter, the single head heated sample pump, and a backpressure regulator prior to distribution to the analyzers via separate flow controlling rotometers. The sample probe located on the exhaust stack is of sufficient length to reach the center sampling point of the stack.

The moisture removal systems continuously remove moisture from the sample gas while maintaining minimal contact between the condensate and the sample gas. The M&C Tech Group Model ECS



thermoelectric gas sample chiller contains two (2) glass heat exchangers that are continuously drained of condensate by a dual head peristaltic pump. Temperature of the chiller is regulated and set to maintain a temperature of 40 °F.

A single head - heated, diaphragm pump is used to transport the gas sample through the system to the analyzers. This pump is manufactured by Air Dimensions and all parts coming into contact with the sample gas stream are Teflon, Kynar or stainless steel.

The COM system monitors the opacity emissions present in the exit gas of the FBI stack. The COMS utilizes a Land Combustion, Model 4500 Mark II, opacity monitor. This monitor is a microprocessor based system and operates in a dual pass mode in the visible light spectrum. Data collection and daily calibration error checks are performed by the data acquisition handling system (DAHS).

**Table 2-1**  
**CEMS Specifications**

<b>Parameter</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Range</b>
O <sub>2</sub> , Dry	Siemens	Oxymat 6E	7MB20211 EA000AA 1	0-25%
CO	Thermo Environmental	48i	1405660903	0-300 ppmvd
Opacity	Land	4500 Mark II	0095478	0-100%

A Contec Data Acquisition Handling System (DAHS) uses an Allen Bradley programmable logic controller (PLC), an Ethernet data highway, a Dell computer, and Windows XP operating system. The system is designed to meet 40 CFR §60.13, 40 CFR 60, Subpart 0, section §60.155, 40 CFR, Part 503, Subpart E, sections §503.41 (f), (h) and CTDEP requirements as provided in the Facilities Title V permit.

The Allen Bradley SLC 505 PLC is the foundation of the data collection, data averaging, alarm, and warning functions. These functions are performed in standard ladder logic. Additionally, the PLC is responsible for daily calibration error checking, short-term data storage, and communications over an Ethernet module to the DAHS computer.

The Contec Data Acquisition Handling System software is configured to display pollutants in units of concentration and in units of emissions. The DAHS also collect process data for Subpart "0" reporting requirements. Data is provided on the display screens as 1 minute averages, 6 min averages (opacity only), 1-hour averages, and 24-hour averages. The system performs standard reporting functions including minute, hourly, daily, and monthly reports, daily calibration and system downtime summaries, and source and analyzer downtime reports. Additionally, the Contec software provides the CEMS data in a graphics mode as trend panels, bar graphs, and strip chart displays. The graphic displays show the CEMS data as real-time or as historical trends. The system also displays and record process data as 1-minute, 1-hour, and 24-hour averages.



### **3.0 SUMMARY OF RESULTS**

#### **3.1 Objectives**

The purpose of this test program was to demonstrate that the accuracy of the CEMS/COMS operated at this facility and to ensure that it met the acceptance criteria for relative accuracy (RA) as required by the Code of Federal Regulations, Title 40 - Part 60, Appendix F, Section 5.0. The opacity audit was performed to satisfy the quarterly Performance Specification 1, Section 7.0. The testing satisfies the requirements set forth in the facility's Title V permit (Permit No 109-0059-TV).

#### **3.2 Field Test Changes**

All testing was conducted in accordance with the current regulations listed in Section 3.1 of this report. No field changes were necessary for this test program.

#### **3.3 Presentation of Results**

A CGA was conducted on the outlet CEMS installed on the incinerator operated at this facility to document the CEMS RA for the first quarter 2015. The CEMS oxygen and carbon monoxide CGA and opacity audits were conducted on March 25, 2015.

The CGA was conducted in accordance with the test procedures and acceptance criteria of 40 CFR 60, Appendix B. All pollutant and diluent gas monitors were each challenged three times with two different calibration standards, a low-audit point and a mid-audit point. The concentrations of audit gases conformed to range specifications defined in 40 CFR 60, Appendix A. The responses of the monitors to the gas standards were recorded by the facility data acquisition and handling system (DAHS) as one-minute averages. The RA of each monitor was determined for each standard as the difference between the average response to the standard, and as a percentage of the standard concentration. The protocol calibration gases were directed into the same location that the gases are sent into for the daily calibrations.

The opacity audit was performed by alternately passing three filters of differing optical density ( $\approx 10\%$ ,  $20\%$  and  $35\%$ ) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

Table 3-1 summarizes the test results for each of the parameters of the CEMS. All monitors were able to demonstrate compliance with the acceptance criteria of 40 CFR Part 60, Appendix B of less than or equal to 15 percent of each audit gas standard concentration during the CGA. Table 3-2 summarizes the COMS test results with criteria found in Performance Specification 1 with the opacity monitor reading with less than 3% difference from the corrected filter value.



## **4.0 SAMPLING AND ANALYTICAL PROCEDURES**

### **4.1 Cylinder Gas Audit Procedure**

The CGAs were conducted in accordance with the test procedures and acceptance criteria of 40 CFR 60, Appendix F. All pollutant and diluent gas monitors were each challenged three times with two different calibration standards, a low audit point and a mid-audit point. The responses of the monitors to the gas standards were recorded by the facility data acquisition and handling system (DAHS). The RA of each monitor was determined for each standard as the difference between the average response to the standard and the standard concentration as an absolute difference, and as a percentage of the standard concentration.

### **4.2 Opacity Audit Procedure**

The opacity audit was performed by alternately passing three filters of different known opacity values (9.72, 20.06, and 32.70) in to the opacity monitor. The results of the audit were calculated using the average response of the monitor over the passes of the filters. The outcome of the opacity audit is based on the results of five passes of the filters.

## **5.0 CK's QUALITY ASSURANCE PROCEDURES**

CK's emission test teams are committed to providing high quality source emissions measurement services. To meet this commitment, CK follows appropriate US EPA sampling procedures and implements appropriate quality assurance/quality control (QA/QC) procedures with all test programs. These procedures ensure that all sampling is performed by competent, trained individuals and that all equipment used is operational and properly calibrated before and after use. Records of all CK equipment calibrations are maintained in CK's files.

The CK quality assurance program generally follows the guidelines of the US EPA *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III - Stationary Source-Specific Methods* (EPA/600/R-94/038c - September 1994) as well as CK's in house Quality Manual.

### **5.1 Sampling**

Compressed gases used as audit standards are always US EPA Traceability Protocol certified calibration gas standards, certified in accordance with Procedure No. G1 with an analytical accuracy of +/- 1 percent. The Certificates of Analysis for the gas standards used during the performance of the CGA were available on site and are presented in Appendix C.

All opacity filters are calibrated and certified by Environmental Monitor Service, Inc. Each filter is assigned a serial number and calibrated on an annual basis. All calibration certificates can be found in Appendix C.



## **5.2 Reporting**

All reports undergo a tiered review. The first review of the report and calculations are made by the report's author. A second review is then performed by another Project Engineer/Scientist. The review process is verified by the signed Report Review Certification which has been included as part of this test report.





## TABLES

---



**Table 3.1 Summary of Results**  
**Cylinder Gas Audit**  
 FB Incinerator  
 Veolia Water NA - Naugatuck, CT  
 Naugatuck, Connecticut  
 1st Qtr - 2015

CEMS	Test Date	Monitor	Span / Units	Cylinder Gas Audit				CGA Criteria
				Standard Conc.	Average Response	Error (% of std.conc.)	Error (abs. diff.)	
Oxygen	03/25/15	Siemens	0-25%	5.01	4.90	2.20	0.11	15.0% or 0.5% O <sub>2</sub>
				10.00	9.90	1.00	0.10	15.0% or 0.5% O <sub>2</sub>
Carbon Monoxide	03/25/15	TECO	0-300 ppm	75.00	77.30	3.07	2.30	15.0% or 5 ppm
				167.80	166.47	0.79	1.33	15.0% or 5 ppm



Table 3.2 Summary of Results

OPACITY AUDIT CALCULATION SHEET

CLIENT: Veolia Water NA - Naugatuck, CT  
SOURCE: FB Incinerator

DATE: 3/25/15  
AUDITOR: Ryan Warren

Corrected  
Filter  
Values (2)

Actual  
Filter  
Values

Run #	Zero	Low	Mid	High	PATH LENGTH CORRECTION FACTOR (PLCF) =	Actual Filter Values	Corrected Filter Values (2)
Pre Zero	0.07					0.714	N/A
1		7.17	15.20	25.28			
2		7.10	15.22	25.19		9.72	7.04
3		7.14	15.10	25.25			
4		7.18	15.16	25.28		20.06	14.77
5		7.19	15.14	25.25			
6 Min Avg		7.14	15.26	25.20		32.70	24.63
Post Zero	0.06						

N	Low	Value	Mid	Value	Delta L	Del L^2	N	High	Value	Delta L	Del L^2
1	7.2	7.0	0.4	15.2	14.8	0.2	1	25.3	24.6	0.7	0.4
2	7.1	7.0	0.1	15.2	14.8	0.2	2	25.2	24.6	0.6	0.3
3	7.1	7.0	0.1	15.1	14.8	0.3	3	25.3	24.6	0.6	0.4
4	7.2	7.0	0.1	15.2	14.8	0.4	4	25.3	24.6	0.7	0.4
5	7.2	7.0	0.1	15.1	14.8	0.1	5	25.3	24.6	0.6	0.4
Sum =			0.8			0.8	Sum =			3.1	1.9
A = Sum (Delta L) ^ 2 =			0.7			3.8	A = Sum (Delta L) ^ 2 =			9.6	
B = Sum (Delta L ^ 2) =			0.2			0.8	B = Sum (Delta L ^ 2) =			1.9	
N =			5.0			5.0	N =			5.0	
(N * B) - A =			0.3			0.0	(N * B) - A =			0.0	

Mean Error (ME) = (Sum Delta L / N)

ME =

Confidence Interval (CI) =  $\text{SQRT}((N*B)-A)*0.2776$

CI =

Calibration Error =  $\text{ABS}(\text{ME}) + \text{CI}$

Calibration Error (1) =

6 Minute Average Mean Error =

(1) - Calculated per 40 CFR 60 Appendix F Procedure 3 ( $\text{CE} \leq 3.0$ )

(2) - Corrected Filter Value =  $1 - (1 - \text{Actual Filter Value})^{\text{PLCF}}$

Mean Error (ME) = (Sum Delta L / N)

ME =

Confidence Interval (CI) =  $\text{SQRT}((N*B)-A)*0.2776$

CI =

Calibration Error =  $\text{ABS}(\text{ME}) + \text{CI}$

Calibration Error (1) =

6 Minute Average Mean Error =

where the actual filter value = (Labeled % opacity / 100)

Mean Error (ME) = (Sum Delta L / N)

ME =

Confidence Interval (CI) =  $\text{SQRT}((N*B)-A)*0.2776$

CI =

Calibration Error =  $\text{ABS}(\text{ME}) + \text{CI}$

Calibration Error (1) =

6 Minute Average Mean Error =

Confidence Interval (CI) =  $\text{SQRT}((N*B)-A)*0.2776$

Calibration Error =  $\text{ABS}(\text{ME}) + \text{CI}$

Calibration Error (1) =

6 Minute Average Mean Error =



## **APPENDIX A**

### **FIELD DATA & CALCULATION SHEETS**

---



## CYLINDER GAS AUDIT DATA SHEET

Client: Veolia Water NA - Naugatuck, CT  
Instrument: Siemens  
Model: Oxymat 6E  
Serial #: 7MB20211-EA000AA 1  
Date: 03/25/15

Test Area: FB Inclinerator  
Diluent: Oxygen  
Range: 0-25%  
Auditor: MU  
Quarter: 1st Qtr - 2015

### LOW-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE	PGVP ID# = N22014 Gas Code = N/A Cylinder # = EB0054499 Exp. Date = 2/4/2022
RESPONSE	4.9	4.9	4.9	4.9	5.01	
TIME	7:38	7:48	7:58	ACCURACY = 2.20		

### MID-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE	PGVP ID# = N22014 Gas Code = N/A Cylinder # = EB0054497 Exp. Date = 2/4/2022
RESPONSE	9.9	9.9	9.9	9.9	10.00	
TIME	7:43	7:54	8:02	ACCURACY = 0.00		

### ACCURACY CALCULATION

$$\text{ACCURACY} = ((C_m - C_a) / C_a) * 100$$

where:  $C_m$  = Analyzer Response during audit (units of standard or concentration)  
 $C_a$  = Average Audit Value (the calibration gas cylinder concentration)



## CYLINDER GAS AUDIT DATA SHEET

Client: Veolia Water NA - Naugatuck, CT  
Instrument: TECO  
Model: 48i  
Serial #: 1405660903  
Date: 03/25/15

Test Area: FB Incinerator  
Pollutant: Carbon Monoxide  
Range: 0-300 ppm  
Auditor: MU  
Quarter: 1st Qtr - 2015

### LOW-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE	PGVP ID# = N22014 Gas Code = N/A Cylinder # = EB0054499 Exp. Date = 2/4/2022
RESPONSE	77.4	77.3	77.2	77.3	75.00	
TIME	7:38	7:48	7:58	ACCURACY = 310%		

### MID-RANGE AUDIT

	Audit Response 1	Audit Response 2	Audit Response 3	AVERAGE RESPONSE	CYLINDER VALUE	PGVP ID# = N22014 Gas Code = N/A Cylinder # = EB0054497 Exp. Date = 2/4/2022
RESPONSE	166.2	166.7	166.5	166.5	167.80	
TIME	7:43	7:54	8:02	ACCURACY = 079%		

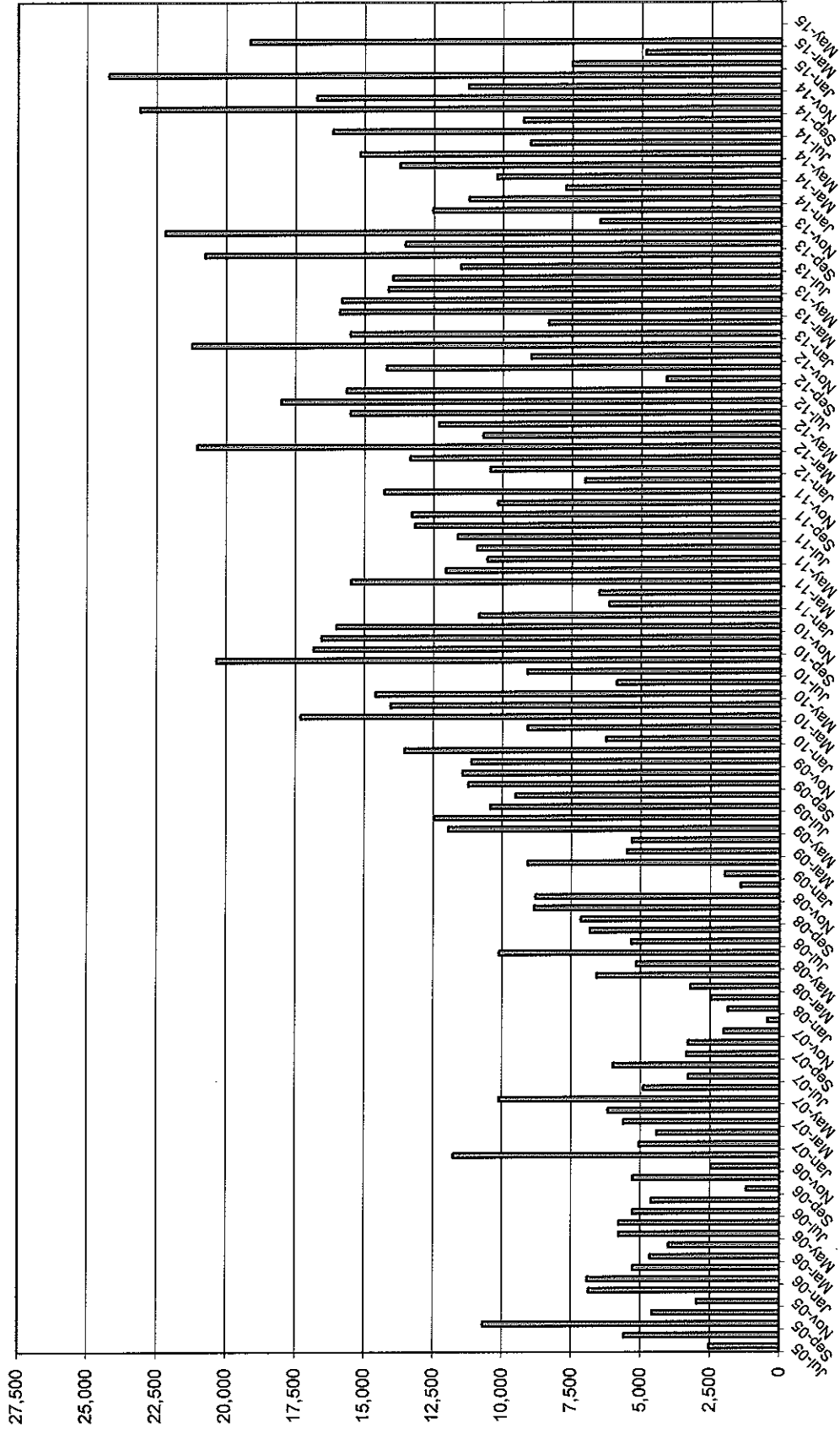
### ACCURACY CALCULATION

$$\text{ACCURACY} = ((C_m - C_a) / C_a) * 100$$

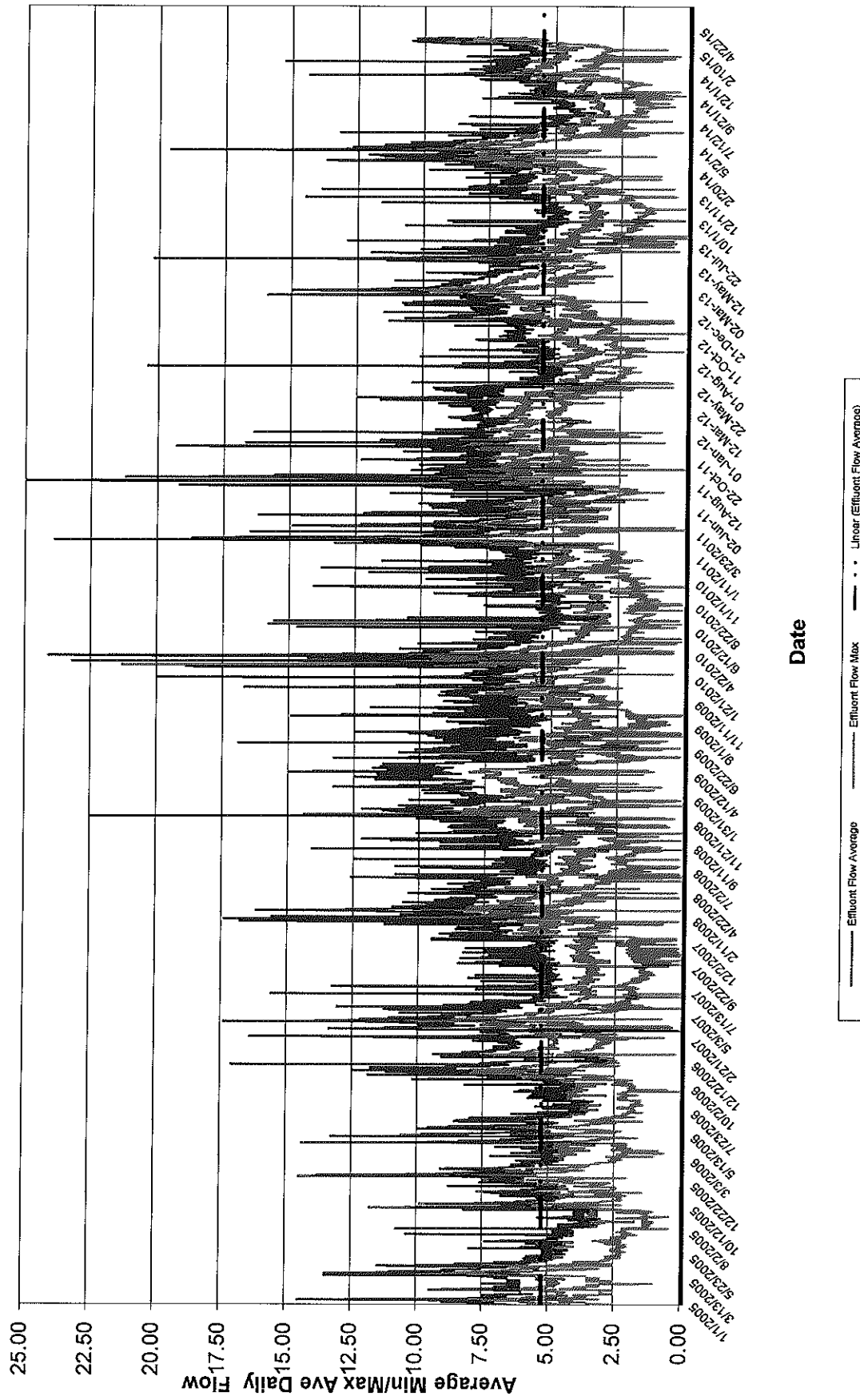
where:  $C_m$  = Analyzer Response during audit (units of standard or concentration)  
 $C_a$  = Average Audit Value (the calibration gas cylinder concentration)

**Borough of Naugatuck  
Total Feet of Sewers Cleaned  
July 2005 to Present**

**Total Feet**

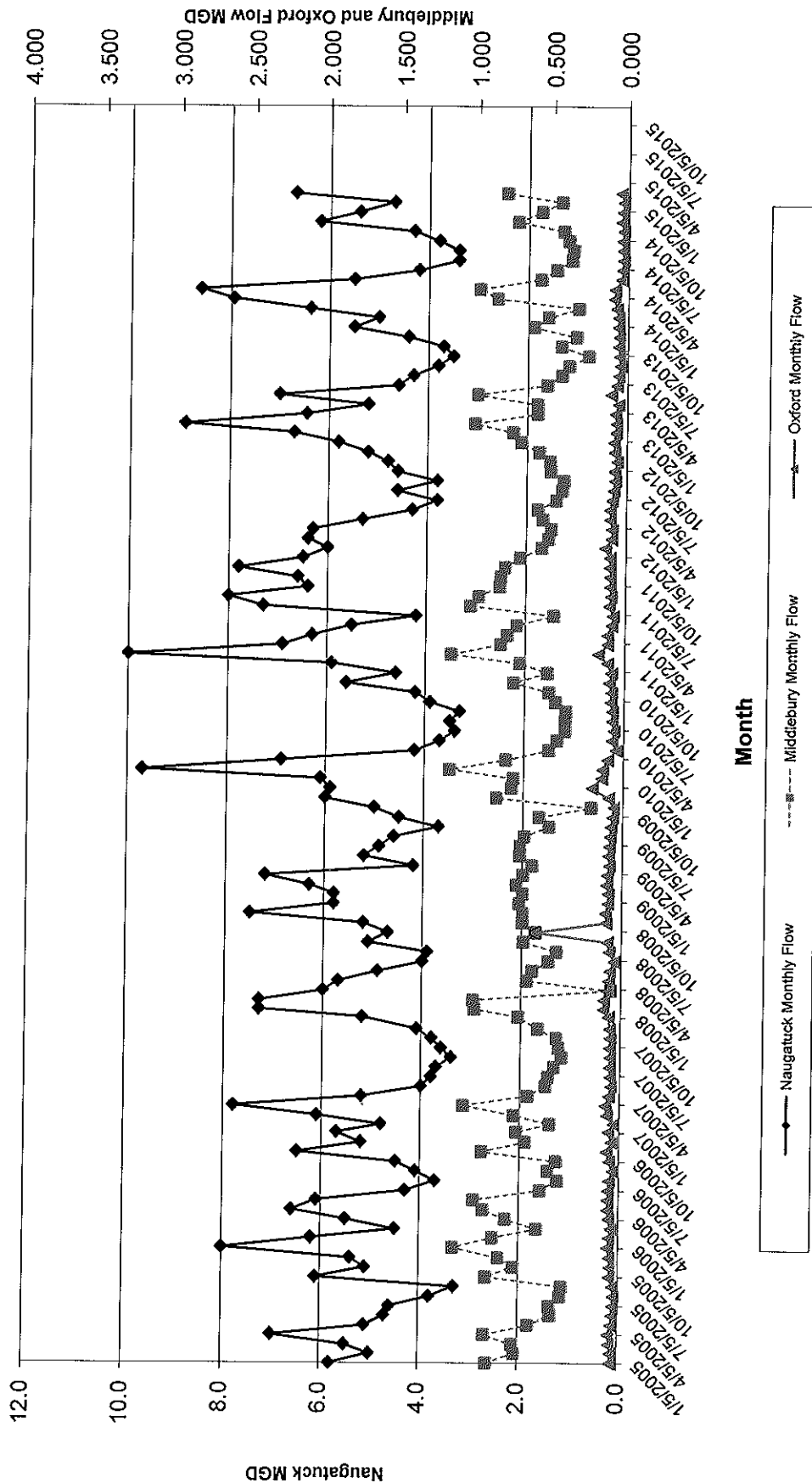


Naugatuck WPCF Daily Min/Max/Total Flow Data  
2005 to Present MGD





# Naugatuck, Middlebury and Oxford 2005 to Present Monthly Average Flows



# ODOR COMPLAINT REPORT

CALLER INFORMATION: DATE: 3-14-15 TIME: 1:16 pm

CALL TAKEN BY: email

NAME OF COMPLAINANT: Denise Figueroa PHONE NUMBER: 203-518-2414

ADDRESS/LOCATION WHERE ODOR IS BEING DETECTED: 326 Cherry St. Ext.

STRENGTH OF ODOR: FAINT ☐ NOTICABLE ☐ DEFINITE ☐ STRONG ☐ OVERWHELMING ☒  
DESCRIPTION OF ODOR: AMMONIA ☐ CABBAGE ☐ FECAL ☐ FISHY ☐ GARLIC ☐ MEDICINAL ☐ ROTTEN EGGS ☐ SKUNKY ☐ SOLVENT/FUEL ☐ OTHER ☐ *email attached*

DOES THE CALLER WANT A FOLLOW-UP CALL? YES ☒ NO ☐

DON'T FORGET TO THANK THE CALLER FOR THEIR CONCERN!!

See attached

## ODOR INVESTIGATION:

(FROM CONTROL ROOM WEATHER STATION)

WIND DIRECTION: ESE WIND SPEED: 5 WEATHER: TEMP 42 RAIN 0.10 HUMID 99 DRY ☐  
UNSEASONABLY WARM/COLD seasonable with light rain

COMPLETE PLANT SURVEY LISTING POSSIBLE SOURCES OF ODORS CONTRIBUTING TO THE COMPLAINT:

Our own cake unloaded to hopper @ 11:15 AM

## ODOR CONTROL EQUIPMENT STATUS:

PRIMARY SCRUBBER: ON ☒ OFF ☐ PH 8.16 ORP 847 MAKE UP WATER: 0.5-1 GPM ☒ SPRAYS ☒

FILTER BLDG SCRUBBER: ON ☒ OFF ☐ PH 8.71 ORP 859 MAKE UP WATER: 1-3 GPM ☒ SPRAYS ☒

## PERMANGANATE FEEDERS:

AERATION: ON ☐ OFF ☒ VERIFIED OPERATIONAL: YES ☐ NO ☐

SLUDGE STORAGE: ON ☒ OFF ☐ VERIFIED OPERATIONAL: YES ☒ NO ☐

ODOR COUNTERACTANT SYSTEM: ON ☐ OFF ☒ VERIFIED OPERATIONAL: YES ☐ SPRAYS ☐  
due to winter /freezing conditions

COMPLAINT REVIEWED BY: John Batorski DATE: 3-16-15 TIME: no action

RETURN CALL MADE BY: same as above DATE:  TIME:

## RETURN CALL RESULTS:

Called Mrs Figueroa on 3-16-15 Monday. Discussed odors, frequency, time etc. She stated odor started ~ 11 AM and got stronger ~~with~~ cont. ~ 1 PM. She stated there are odors on weekends (same), or early in the morning. She stated people were moving out due to odors. I told her we had 1 truck dump that Saturday around 11 AM. No other trucks were on site. That day our Admin Manager, Maint. Mgr & Ass't Supt were all on site and reported no unusual odors. They were on site ~ 10 AM to 2 PM. I told her we take every complaint seriously and try to determine the cause. She did state while there were odors it is better than years ago.



Benoit, Suzanne &lt;suzanne.benoit@veolia.com&gt;

---

**Fwd: odor complaint 3/15/5**

1 message

---

**Batorski, John** <john.batorski@veolia.com>

Mon, Mar 16, 2015 at 7:29 AM


To: Debbie Camp &lt;debbie.camp@veolia.com&gt;, Suzanne Benoit &lt;suzanne.benoit@veolia.com&gt;, John Daunis &lt;john.daunis@veolia.com&gt;, Ray Spry &lt;rayspry@optimum.net&gt;, Tom Deller &lt;tom.deller@veolia.com&gt;

FYI

**John Batorski***Plant Manager - Northeast LLC**Municipal & Commercial Business***VEOLIA NORTH AMERICA**

tel +1 203 723 1433 / cell +1 203 509 6010

500 Cherry Street / Naugatuck, CT 06770

[John.Batorski@veolia.com](mailto:John.Batorski@veolia.com)[www.veolionorthamerica.com](http://www.veolionorthamerica.com)Resourcing the world  **VEOLIA**

----- Forwarded message -----

From: **Denise Figueroa** <deefig@gmail.com>

Date: 14 March 2015 at 13:16

Subject: odor complaint 3/15/5

To: "deep.aircomplaints@ct.gov" &lt;deep.aircomplaints@ct.gov&gt;, "carmencita.wilson@ct.gov" &lt;carmencita.wilson@ct.gov&gt;, "wzirolli@naugatuck-ct.gov" &lt;wzirolli@naugatuck-ct.gov&gt;, Bob Mezzo &lt;bmezzo@naugatuck-ct.gov&gt;, John Batorski &lt;John.Batorski@veolia.com&gt;

Cc: "seng.phouthakoun@ct.gov" &lt;seng.phouthakoun@ct.gov&gt;

The odor of sewage on Cherry Street Extension today is very strong. Intruded it at about 11am today and it has steadily increased. It is now 1pm and the odor is so strong it is intolerable. It is currently 39f and raining now. Please feel free to contact me with any questions you may have,

**Denise Figueroa**

deefig@gmail.com

203-518-2414

326 Cherry St. Ext.

Naugatuck, CT 06770